

**REMARKS / ARGUMENTS**

Reconsideration of the application is requested.

Claims 1-3 and 5-48 are now in the application. Claims 1, 6, 8, 10, and 14-17 have been amended. Claim 4 has been cancelled. Claims 21-48 have been added.

In item 2 on pages 2-3 of the above-mentioned Office action, claims 1-3, 5, 7, 11-13, and 18-19 have been rejected as being anticipated by Miyajima (US Pat. No. 5,885,352) under 35 U.S.C. § 102(b).

In item 4 on page 3 of the above-mentioned Office action, claims 16-17 have been rejected as being unpatentable over Miyajima in view of Kawai et al. (US Pat. No. 5,200,021) under 35 U.S.C. § 103(a).

In item 5 on pages 3-4 of the above-mentioned Office action, claim 20 has been rejected as being unpatentable over Miyajima under 35 U.S.C. § 103(a).

The rejections have been noted and claim 1 has been amended in an effort to even more clearly define the invention of the

instant application. More specifically, the features of claim 4 have been added to claim 1.

Since claim 4 contains allowable subject matter as indicated by the Examiner in item 6 on page 4 of the Office action, claim 1 is now believed to be allowable. Since claims 2-3, 5, 7, 11-13, and 16-20 are ultimately dependent on claim 1, they are believed to be allowable as well.

In addition, the Examiner's rejection of claims 16-17 is incorrect. Kawai et al. describe an RF coil 8 which heats the gallium-arsenide substrate 1 to a temperature of 700°C (see column 6, lines 28-30). In the invention of the instant application, the cooling and heating devices heat the sensor element in order to more precisely control the sensor device (intensify or reduce the deposition at the opening) rather than the substrate (see page 17, lines 11-16 of the specification). Claims 16-17 have been amended to clearly recite that the cooling and heating devices are provided to cool and heat the sensor element, respectively. Claims 16-17 are believed to be patentable since none of the references, whether taken alone or in any combination, either show or suggest the cooling and heating devices that cool and heat the sensor element.

Applicants acknowledge the Examiner's statement in item 6 on page 4 of the above-mentioned Office action that claims 4, 6, 8-10, and 14-15 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The feature of claim 4 has been added to claim 1. Claims 6, 8, 10, and 14-15 have been written in independent form including all of the limitations of the base claim and any intervening claims. Since claim 9 is dependent on allowable claim 8, it is believed to be allowable in dependent form.

Claims 21-48 have been added. Since claims 21-48 are ultimately dependent on allowable claims 6, 8, 10, 14, and 15, they are believed to be allowable as well.

In view of the foregoing, an early issuance of a Notice of Allowance to claims 1-3 and 5-48 is solicited.

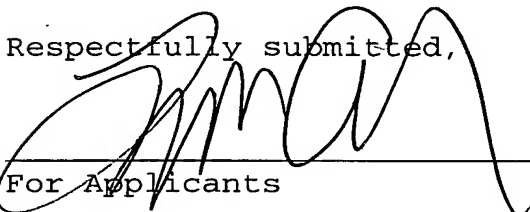
In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out. In the alternative, the entry of the amendment is requested as it is believed to place the application in better condition

for appeal, without requiring extension of the field of search.

The fee in the amount of \$ 744.00 for three extra independent claims in excess of three and twenty-seven claims in excess of twenty is enclosed herewith.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

  
For Applicants

LAURENCE A. GREENBERG  
REG. NO. 29,308

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Lerner and Greenberg, P.A.  
Post Office Box 2480  
Hollywood, FL 33022-2480  
Tel: (954) 925-1100  
Fax: (954) 925-1101